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***ABC v. Aereo*: HOW THE SUPREME COURT’S FLAWED  
RATIONALE WILL IMPLICATE PROBLEMS IN NEW  
TECHNOLOGIES**

***Collette Corser\****

*The Copyright Act promotes the creation and progress of arts by protecting original works, such as by guaranteeing copyright holders the exclusive right to publicly perform their works. In an age of rapid technological development, courts have often struggled with how to best interpret and apply this public performance right to providers who stream broadcast television programs over the Internet. A central question in this debate is what constitutes a “performance” under the Copyright Act. This Recent Development explores the Supreme Court’s latest attempt at defining this issue, and argues that its decision in American Broadcasting Companies, Inc. v. Aereo, Inc. only further confuses this area of law and poses problems for other emerging technologies, including cloud storage and sharing technologies.*

**I. INTRODUCTION**

Congress enacted the Copyright Act to promote the progress of useful arts by protecting original works.<sup>1</sup> Despite this clear and noble purpose, the meaning of copyright infringement under the Act has been a point of contention and has thus led to various results across jurisdictions.<sup>2</sup> This summer, the Supreme Court

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<sup>1</sup> 17 U.S.C. § 102 (2010). *See also* U.S. CONST. art. I, § 8, cl. 8 (“To promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries.”).

<sup>2</sup> *See* Cartoon Network LP, LLLP v. Cablevision Systems Corp. Holdings, Inc. (*Cablevision*), 536 F.3d 121 (2d Cir. 2008) (holding that defendant Cablevision’s RS-DVR service did not directly infringe on movie and television copyright holders’ rights); WPIX, Inc. v. ivi, Inc., 691 F.3d 275 (2d Cir. 2012)

again addressed the issue of copyright infringement and attempted to clarify this ambiguity in their opinion of *American Broadcasting Companies, Inc. v. Aereo, Inc.*<sup>3</sup>

The Court considered whether Aereo, an online streaming service, infringed on the exclusive right of certain copyright holders when it sold subscribers a service allowing them to stream and watch television programs over the Internet at almost the same time as the programs were broadcast over the air.<sup>4</sup> The plaintiff copyright owners included television producers, marketers, distributors, and broadcasters who owned the copyrights to many programs that Aereo's system streamed to its subscribers.<sup>5</sup> Plaintiffs brought suit seeking a preliminary injunction, arguing that Aereo was infringing on their right to "perform" their copyrighted works "publicly."<sup>6</sup> The Court looked to the Copyright Act, which grants owners the exclusive right to perform their copyrighted works publicly.<sup>7</sup> The Court sought to determine: (1) whether Aereo's system constitutes a performance under the meaning of the word as the act defines it, and if so, (2) whether that performance is public.<sup>8</sup> Relying heavily on congressional intent, the Court held that Aereo did perform the copyrighted works publicly and was thus liable for infringement.<sup>9</sup> However, this decision was not unanimous. Justice Scalia authored a dissent, joined by Justices Thomas and Alito, criticizing the majority's ad hoc approach and offering a textual argument for applying a volitional-conduct test to determine defendant's liability.<sup>10</sup>

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(holding that defendant ivi was not a cable system); *Fox Television Stations, Inc. v. BarryDriller Content Systems, PLC*, 915 F. Supp. 2d 1138 (C.D. Cal 2012) (granting a preliminary injunction to the broadcast network against BarryDriller's system, which is very similar to Aereo's system, in a copyright infringement claim).

<sup>3</sup> *Am. Broad. Cos., Inc. v. Aereo, Inc.*, 134 S. Ct. 2498 (2014).

<sup>4</sup> *Id.* at 2503.

<sup>5</sup> *Id.*

<sup>6</sup> *Id.* at 2503–04.

<sup>7</sup> 17 U.S.C § 106(4) (2012).

<sup>8</sup> *Aereo*, 134 S. Ct. at 2504.

<sup>9</sup> *Id.* at 2511.

<sup>10</sup> *Id.* at 2517.

This Recent Development argues that the Court's opinion misinterprets the Copyright Act. By using an ad hoc and ends-justify-the-means rationale, the majority gives too much discretion to lower courts in determining technically complex cases. The better approach is the dissent's bright-line volitional-conduct analysis, which would provide courts with a clear way to interpret copyright cases involving complex technologies. Part II sets forth the facts of *Aereo* and prior development of the Copyright Act. Part III examines the majority's rationale and proposes complications that will arise because of the majority's approach. Part IV predicts the impact this holding will have on new technologies and Part V concludes with recommendations for how to address future cases of copyright infringement.

## II. BACKGROUND

Aereo's system operated by assigning each subscriber his own antenna, which transmitted a copy of the subscriber's requested program to him via an Internet connection.<sup>11</sup> In *Aereo*, the Supreme Court addressed whether Aereo's system infringed on the television broadcasters' exclusive right to publicly perform their works, as defined by the Copyright Act.<sup>12</sup> The Copyright Act does not specifically address technology identical to that employed by Aereo, and similar systems have been subject to varying interpretations by lower courts.<sup>13</sup>

### A. *The Specifics of Aereo's Online Service*

Aereo's system transmitted broadcast television programs to its subscribers over the Internet.<sup>14</sup> Understanding of the specifics of Aereo's operations is best achieved by looking at both the subscriber's perspective and the technical, or "behind the scenes" perspective.<sup>15</sup>

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<sup>11</sup> See discussion *infra* Part II.A.

<sup>12</sup> *Aereo*, 134 S. Ct. at 2503.

<sup>13</sup> See discussion *infra* Part II.C.

<sup>14</sup> *WNET, Thirteen v. Aereo, Inc.*, 712 F.3d 676, 680 (2d Cir. 2013), *rev'd*, *Am. Broad. Cos., Inc. v. Aereo, Inc.*, 134 S. Ct. 2498 (2014).

<sup>15</sup> *Id.*

From a subscriber's point of view, Aereo provided the functionality of both a standard television and a DVR because Aereo's system allowed subscribers to watch, record, and/or pause live television using an Internet-connected device.<sup>16</sup> When a subscriber logged into his Aereo account, he could access a guide of broadcast television programs.<sup>17</sup> Depending upon whether the program had already aired, the subscriber could choose to either "Watch" or "Record" the selected program.<sup>18</sup> If the subscriber choose to watch the program, he could pause, rewind, or record the program as he viewed the show.<sup>19</sup> If the subscriber chose instead to record a program, Aereo saved a copy of that program for later viewing, which the subscriber could choose to playback at his convenience.<sup>20</sup> The difference between the "Watch" and "Record" feature was that a program viewed with only the "Watch" function was not retained for later viewing.<sup>21</sup>

From a technical perspective, Aereo's system was comprised of servers, transcoders, and several large antenna boards housed in a central warehouse.<sup>22</sup> Each board contained approximately eighty antennas, which consisted of two dime-sized metal loops.<sup>23</sup> In total, thousands of such antennas spanned the warehouse.<sup>24</sup> When an

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<sup>16</sup> *Id.* at 681–82 (“[U]sers can watch Aereo programming on a variety of devices. Aereo’s primary means of transmitting a program to a user is via an Internet browser, which users can access on their computers. Aereo users can also watch programs on mobile devices such as tablets or smart phones using mobile applications.”).

<sup>17</sup> *Id.* at 681.

<sup>18</sup> *Id.*

<sup>19</sup> *Id.*

<sup>20</sup> If a subscriber selects a program that will air in the future, the “Record” function is his only option. In this case, Aereo will record the program when it airs, saving a copy for the viewer to watch at his convenience. *Id.*

<sup>21</sup> *Id.*

<sup>22</sup> *Id.* at 682; *Am. Broad. Cos., Inc. v. Aereo, Inc.*, 134 S. Ct. 2498, 2503 (2014).

<sup>23</sup> *WNET*, 712 F.3d at 682 (noting that these antenna boards are installed parallel to each other in the warehouse in such a way that the antennas extend out in order to receive the television broadcast signals. Thus, Aereo’s facility uses thousands of individual antennas to receive the broadcast television signals.).

<sup>24</sup> *Id.*

Aereo subscriber selected a program to either watch or record, that selection sent a signal to Aereo's server.<sup>25</sup> The server initially assigned one of the individual antennas and a transcoder to the subscriber, and it tuned the antenna to the broadcast frequency of the requested program.<sup>26</sup> The server next transcoded<sup>27</sup> the data received by the antenna, buffered the data, and sent the data to another server where a copy of the program was saved in a subscriber-specific folder on Aereo's hard drive.<sup>28</sup> This process allowed Aereo to save a subscriber-specific copy of the program.<sup>29</sup>

When the subscriber chose to only watch, and not record, his selected program, Aereo's server began to stream the saved copy of the program after several seconds of the program had been saved.<sup>30</sup> Once the program ended, if the subscriber had only chosen the "Watch" function, Aereo automatically deleted that copy of the program.<sup>31</sup> If the subscriber only selected to record the program, the copy of the program was saved in the subscriber's folder for later viewing.<sup>32</sup>

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<sup>25</sup> *Id.*

<sup>26</sup> *Id.*

<sup>27</sup> *Am. Broad. Cos., Inc. v. Aereo, Inc.*, 134 S. Ct. 2498, 2503 (2014) (explaining that transcoding refers to the process in which signals received by the antenna are translated into data that can be transmitted over the Internet).

<sup>28</sup> *WNET*, 712 F.3d at 682–83. ("Three technical details of Aereo's system merit further elaboration. First, Aereo assigns an individual antenna to each user. No two users share the same antenna at the same time, even if they are watching or recording the same program. Second, the signal received by each antenna is used to create an individual copy of the program in the user's personal directory. Even when two users are watching or recording the same program, a separate copy of the program is created for each. Finally, when a user watches a program, whether nearly live or previously recorded, he sees his individual copy on his TV, computer, or mobile-device screen. Each copy of a program is only accessible to the user who requested that the copy be made, whether that copy is used to watch the program nearly live or hours after it has finished airing; no other Aereo user can ever view that particular copy.").

<sup>29</sup> *Aereo*, 134 S. Ct. at 2503 (2014) (finding that rather than sending the program directly to the subscriber, "a server saves the data in a subscriber-specific folder on Aereo's hard drive," creating a personal copy of the program for subscriber").

<sup>30</sup> *Id.*

<sup>31</sup> *WNET*, 712 F.3d at 682.

<sup>32</sup> *Id.*

B. *Text of the Copyright Act*

Congress revised the 1909 Copyright Act in 1976, shortly after the Supreme Court issued two opinions addressing cable-television technology.<sup>33</sup> In *Fortnightly Corp. v. United Artists Television Inc.*<sup>34</sup> and *Teleprompter Corp. v. Columbia Broadcasting System, Inc.*,<sup>35</sup> the Supreme Court held that the cable television systems in question did not infringe on copyright holders' rights because the systems did not "perform" the works as defined by the then-current 1909 Copyright Act.<sup>36</sup> In response to these holdings, Congress enacted the 1976 Copyright Act, which is still in effect today.<sup>37</sup>

The 1976 Copyright Act grants the owner of a copyright various exclusive rights including the right to perform their work publicly.<sup>38</sup> This section also gives the owner of a copyright the exclusive right to authorize another party to publicly perform their

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<sup>33</sup> Thomas M. Carter, *The Copyright Act and the Frontier of "Television": What to do About Aereo*, 67 VAND. L. REV. EN BANC 97, 103–04 (2014) (citing *WNET, Thirteen v. Aereo, Inc.*, 712 F.3d 676, 685 (2d Cir. 2013)) (discussing the results of *Fortnightly* and *Teleprompter*, where the Supreme Court determined that there was no public performance because the 1909 Copyright Act did not contain a section comparable to the current Transmit Clause).

<sup>34</sup> 392 U.S. 390 (1968).

<sup>35</sup> 415 U.S. 394 (1974).

<sup>36</sup> *Fortnightly*, 392 U.S. at 399–401; *Teleprompter*, 415 U.S. at 408. See also *WNET, Thirteen v. Aereo, Inc.*, 712 F.3d 676, 685 (2d Cir. 2013), *rev'd*, Am. Broad. Cos., Inc. v. Aereo, Inc., 134 S. Ct. 2498 (2014) ("[The *Fortnightly* and *Teleprompter*] decisions held that under the then-current 1909 Copyright Act, which lacked any analog to the Transmit Clause, a cable television system that received broadcast television signals via antenna and retransmitted these signals to its subscribers via coaxial cable did not 'perform' the copyrighted works and therefore did not infringe copyright holders' public performance right.").

<sup>37</sup> H.R. REP. NO. 94-1476, at 63 (1976) ("Under the definitions of 'perform,' 'display,' 'publicly,' and 'transmit' in section 101, the concepts of public performance and public display cover not only the initial rendition or showing, but also any further act by which that rendition or showing is transmitted or communicated to the public. Thus, for example . . . a cable television system is performing when it retransmits the broadcast to its subscribers."). See *WNET*, 712 F.3d at 685; 17 U.S.C. §§ 104, 111(d) (2012).

<sup>38</sup> 17 U.S.C. § 106(4) (2012) ("[T]he owner of a copyright under this title has the exclusive rights to do and to authorize . . . in the case of literary, musical, dramatic, and choreographic works, pantomimes, and motion pictures and other audiovisual works, to perform the copyrighted work publicly.").

works.<sup>39</sup> The Copyright Act further defines “perform” as “to recite, render, play, dance, or act, either directly or by means of any device or process or, in the case of a motion picture or other audiovisual work, to show its images in any sequence or to make the sounds accompanying it audible.”<sup>40</sup> Congress added what is known as the “Transmit Clause” to the Copyright Act, which defines a public performance as transmitting or otherwise communicating a performance of a copyrighted work to the public by means of any device or process.<sup>41</sup>

The Copyright Act also requires copyright holders and cable companies that retransmit the copyrighted works to enter into compulsory licensing agreements under § 111.<sup>42</sup> Within this section, Congress defines cable systems that would be subject to these licensing agreements as any facility that receives transmitted signals or programs broadcasted by a Federal Communications Commission (“FCC”) licensed station and makes secondary transmissions of those signals to subscribing members of the public that pay for such service.<sup>43</sup>

Today, the Copyright Act thus provides copyright holders the exclusive right to publicly perform their works. It also states that

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<sup>39</sup> *Id.*

<sup>40</sup> 17 U.S.C. § 101 (2012).

<sup>41</sup> *Id.* (“To perform or display a work ‘publicly’ means . . . to *transmit* or otherwise communicate a performance or display of the work to a place specified by clause (1) or to the public, by means of any device or process, whether the members of the public capable of receiving the performance or display receive it in the same place or in separate places and at the same time or at different times.”) (emphasis added).

<sup>42</sup> 17 U.S.C. § 111(c)(1) (2012) (“[S]econdary transmissions to the public by a cable system of a performance or display of a work embodied in a primary transmission made by a broadcast station licensed by the Federal Communications Commission or by an appropriate governmental authority . . . shall be subject to statutory licensing”).

<sup>43</sup> 17 U.S.C. § 111(f)(3) (2012) (“A ‘cable system’ is a facility, located in any State, territory, trust territory, or possession of the United States, that in whole or in part receives signals transmitted or programs broadcast by one or more television broadcast stations licensed by the Federal Communications Commission, and makes secondary transmissions of such signals or programs by wires, cables, microwave, or other communications channels to subscribing members of the public who pay for such service.”).



transmitting copyrighted works constitutes a performance, while providing a compulsory licensing scheme for providers that meet the Act's definition of cable systems.

*C. Judicial Interpretations of the Copyright Act*

After the 1976 amendments, interpretation of the public performance right as applied to new and emerging technologies has varied by jurisdiction. For instance, in *Cartoon Network LP, LLLP v. CSC Holdings, Inc.*<sup>44</sup> (“*Cablevision*”), the Second Circuit held that defendant Cablevision’s new Remote Storage Digital Video Recorder system (“RS-DVR”) did not infringe on the copyright holder’s exclusive right to publicly perform their works.<sup>45</sup> The RS-DVR system allowed Cablevision customers “to record cable programming on central hard drives housed and maintained by Cablevision at a ‘remote’ location. RS-DVR customers [could] then receive playback of those programs through their home television sets, using only a remote control and a standard cable box equipped with the RS-DVR software.”<sup>46</sup> Thus, the RS-DVR service was much like a traditional DVR service, allowing customers to store recorded programs on an internal hard drive and play them back at their own convenience.<sup>47</sup> However, there was one difference from traditional DVR services: instead of storing the copyrighted programs on an internal hard drive, the RS-DVR service would store the programs at a Cablevision facility.<sup>48</sup> The Second Circuit concluded that each transmission was private because each individual subscriber made transmissions through his own personal copies.<sup>49</sup> Since each transmission was private, the Second Circuit held that Cablevision could not be

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<sup>44</sup> 536 F.3d 121 (2d Cir. 2008).

<sup>45</sup> *Id.* at 123.

<sup>46</sup> *Id.* at 124.

<sup>47</sup> *Id.* at 123–24.

<sup>48</sup> *Id.* at 124.

<sup>49</sup> *Id.* at 137–38 (finding that the “universe of people capable of receiving an RS-DVR transmission is the single subscriber whose self-made copy is used to create that transmission”).

publicly performing the copyrighted works and thus was not liable for copyright infringement.<sup>50</sup>

In *WPIX, Inc. v. ivi, Inc.*,<sup>51</sup> the Second Circuit addressed whether ivi, which admitted to violating plaintiffs' public performance rights, was a cable system entitled to the compulsory licensing fee under § 111 of the Copyright Act.<sup>52</sup> ivi's system operated by capturing and retransmitting plaintiffs' copyrighted television programs live over the Internet to its subscribers.<sup>53</sup> The Second Circuit first examined the plain language of § 111, and finding it inconclusive regarding the Internet, then turned its focus to legislative intent.<sup>54</sup>

In examining the legislative history of the 1976 Copyright Act, the Second Circuit found that Congress's intent was not to include Internet transmissions under § 111's licensing scheme.<sup>55</sup> Specifically, the Second Circuit concluded that legislative history indicated that Congress enacted § 111 to address the issues of poor television reception in certain areas by allowing licensing programs that would support local systems to provide cable to these areas.<sup>56</sup> The Second Circuit also acknowledged that if Congress had intended for the compulsory licensing agreements to apply to the Internet, it would have explicitly included such Internet transmissions in the

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<sup>50</sup> *Id.* at 139 (concluding that the RS-DVR "transmissions are not performances 'to the public,' and therefore do not infringe any exclusive right of public performance").

<sup>51</sup> 691 F.3d 275 (2d Cir. 2012).

<sup>52</sup> *Id.* at 278–79.

<sup>53</sup> *Id.* at 277–79 (noting that within 5 months after its launch, ivi offered over 4,000 of plaintiffs' copyrighted television programs to its subscribers).

<sup>54</sup> *Id.* at 280 ("Based on the statutory text alone, it is simply not clear whether a service that transmits television programming live and over the Internet constitutes a cable system under § 111.").

<sup>55</sup> *Id.* at 282.

<sup>56</sup> *Id.* at 281 (citing U.S. Copyright Office, *Satellite Home Viewer Extension and Reauthorization Act Section 109 Report* 1 (2008) ("SHVERA Report")) (concluding that Congress enacted § 111 to enable cable systems to provide service to more geographic areas while offering broadcasters protection to incentivize their continued broadcasts).

statute.<sup>57</sup> Finally, the Second Circuit cited the Copyright Office's statement "that Internet retransmission services are not cable systems and do not qualify for § 111 compulsory licenses."<sup>58</sup> Pursuant to its conclusion that ivi was not a cable system, the court upheld the injunction preventing ivi from streaming copyrighted programs.<sup>59</sup>

Later that year, in *American Broadcasting Companies, Inc. v. Aereo, Inc.*<sup>60</sup> ("Aereo I"), the Southern District of New York applied *Cablevision* and held that Aereo did not infringe on the rights of copyright holders to publicly perform their works.<sup>61</sup> There, the court found that Aereo's system, which allowed subscribers to view plaintiffs' copyrighted works over the Internet, was analogous to *Cablevision's* because each subscriber was assigned his own antenna, so it was not a public transmission.<sup>62</sup> Instead, each recording was made individually at each subscriber's request.<sup>63</sup>

Contrast *Aereo I* to a case decided later that same year, *Fox Television Stations, Inc. v. BarryDiller Content Systems, PLC.*<sup>64</sup> In *BarryDriller*, a California court had to determine whether BarryDriller's system, which was similar to Aereo's, infringed on the plaintiffs' copyrighted works.<sup>65</sup> In determining whether BarryDriller should be subject to a preliminary injunction, the district court noted the

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<sup>57</sup> See *id.* (noting that Congress codified a separate statutory license for satellite carries (the Satellite Home Viewer Act of 1998) and also amended § 111's language in 1994 to expressly include microwaves).

<sup>58</sup> *Id.* at 283, (quoting U.S. Copyright Office, *A Review of the Copyright Licensing Regimes Covering Retransmission of Broadcast Signals* 97 (1997)).

<sup>59</sup> *Id.* at 285.

<sup>60</sup> 874 F. Supp. 2d 373 (S.D.N.Y. 2012), *rev'd*, 134 S. Ct. 2498 (2014).

<sup>61</sup> *Id.* at 375.

<sup>62</sup> *Id.* at 385–86 ("As in *Cablevision*, the functionality of Aereo's system from the user's perspective substantially mirrors that available using devices such as a DVR or Slingbox, which allow users to access free, over-the-air broadcast television on mobile internet devices of their choosing.").

<sup>63</sup> *Id.* at 386.

<sup>64</sup> 915 F. Supp. 2d 1138 (C.D. Cal 2012).

<sup>65</sup> *Id.* at 1140–41 ("Plaintiffs accuse Defendants of offering their copyrighted content through internet and mobile device streaming. Defendants do not deny that they retransmit Plaintiffs' copyrighted broadcast programming, but argue that their service is legal because it is technologically analogous to the service which the Southern District of New York found to be non-infringing.").

differing approaches taken by the Second Circuit and the Ninth Circuit in deciding infringement cases.<sup>66</sup> The court refused to apply the Second Circuit's approach, which held that transmissions of individual copies do not infringe on the public performance right.<sup>67</sup> Instead, the *BarryDriller* court focused on whether the defendant's system was performing the work at all, irrespective of the specific copy of the work from which the transmission was made.<sup>68</sup> Rejecting the Second Circuit's approach, the court held that BarryDriller was infringing on Fox's copyrighted works and granted a preliminary injunction.<sup>69</sup>

The District of Columbia Circuit next decided *Fox Television Stations, Inc. v. FilmOn X LLC*,<sup>70</sup> with Fox arguing that FilmOn should be held liable based on the *BarryDriller* decision.<sup>71</sup> FilmOn responded that following *Cablevision*, its system was not liable for copyright infringement because it does not publicly perform the copyrighted works.<sup>72</sup> The district court decided for Fox, acknowledging that although it was not bound by either the Second Circuit's decisions or California's *BarryDriller* ruling, it "f[ound] *BarryDriller* to be more persuasive."<sup>73</sup> In concluding that the Copyright Act

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<sup>66</sup> *Id.* at 1145 ("The Second Circuit's focus is also in tension with precedent in the Ninth Circuit.").

<sup>67</sup> *Id.* at 1144 (characterizing the Second Circuit's reasoning as "unless the transmission itself is public, the transmitter has not infringed the public performance right").

<sup>68</sup> *Id.* ("Again the concern is with the performance of the copyrighted work, irrespective of which copy of the work the transmission is made from.").

<sup>69</sup> *Id.* at 1149.

<sup>70</sup> 966 F. Supp. 2d 30 (D.D.C. 2013).

<sup>71</sup> *Id.* at 32.

<sup>72</sup> *Id.* FilmOn specifically responded that its system was modeled after the approved system from the *Cablevision* decision. It assigned each subscriber an individual antenna, thus creating a one-to-one relationship. FilmOn asserted that this process did not infringe on the plaintiffs' exclusive right to publicly perform its copyrighted works and so it was not liable for copyright infringement. *Id.*

<sup>73</sup> *Id.* at 33 ("The Court has carefully considered the rulings in *Cablevision* and *Aereo II*, but it is not bound by them or by the California court's ruling in *BarryDriller*, although the Court finds *BarryDriller* to be more persuasive.").

prohibits FilmOn's retransmission services, the court granted a preliminary injunction against its services.<sup>74</sup>

Despite these two consecutive findings of infringement in the Ninth and D.C. Circuits, in *WNET, Thirteen v. Aereo*,<sup>75</sup> the Second Circuit applied *Cablevision*'s interpretation of the Transmit Clause and held that Aereo was not liable for infringement.<sup>76</sup> In applying *Cablevision*, the Second Circuit used a four-part inquiry to determine whether to award a preliminary injunction.<sup>77</sup> First, it considered the potential audience of the transmission.<sup>78</sup> Second, it recognized the rule that private transmissions should not be aggregated.<sup>79</sup> Third, it acknowledged an exception to the second rule, finding that private transmissions generated from the same copy of the work may be aggregated.<sup>80</sup> Finally, it accepted any other factor that limited the potential audience of a transmission as a relevant fact to the Transmit Clause analysis.<sup>81</sup> Using these four guidelines, the Second Circuit determined Aereo's system was analogous to the RS-DVR system in *Cablevision* and thus not liable for infringement.<sup>82</sup> Aereo's potential audience was the single user who requested the program to be recorded, and thus it was not

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<sup>74</sup> *Id.* ("This Court concludes that the Copyright Act forbids FilmOn X from retransmitting Plaintiffs' copyrighted programs over the Internet. Plaintiffs are thus likely to succeed on their claim that FilmOn X violates Plaintiffs' exclusive public performance rights in their copyrighted works. Because there is no dispute of fact between the parties . . . the Court will grant Plaintiffs' motion for a preliminary injunction.").

<sup>75</sup> 712 F.3d 676 (2d Cir. 2013).

<sup>76</sup> *Id.* at 696.

<sup>77</sup> *Id.* at 689.

<sup>78</sup> *Id.* (acknowledging "if the potential audience of the transmission is only one subscriber, the transmission is not a public performance, except as discussed [in subsequent factors]").

<sup>79</sup> *Id.* ("It is therefore irrelevant to the Transmit Clause analysis whether the public is capable of receiving the same underlying work or original performance of the work by means of many transmissions.").

<sup>80</sup> *Id.* ("In such cases, these private transmissions *should* be aggregated, and if these aggregated transmissions from a single copy enable the public to view that copy, the transmission are public performances.").

<sup>81</sup> *Id.* (quoting *Cartoon Network LP, LLLP v. CSC Holdings, Inc. (Cablevision)*, 536 F.3d 121, 137 (2d Cir. 2008)).

<sup>82</sup> *See id.* at 690.

a public transmission.<sup>83</sup> Like the RS-DVR service, Aereo created unique copies of every program an individual subscriber wished to perform.<sup>84</sup> Additionally, when an Aereo user chose to watch a program, the transmission he viewed was generated from his unique copy; no other user received that copy.<sup>85</sup>

Judge Chin authored a dissent calling Aereo's technology "a sham" and "over-engineered in an attempt to avoid the reach of the Copyright Act and to take advantage of a perceived loophole in the law."<sup>86</sup> In reaching his conclusion, Judge Chin examined the statutory text of the Copyright Act and the legislative intent in enacting the Transmit Clause,<sup>87</sup> finding a critical difference between Aereo's and Cablevision's services: Cablevision's underlying cable system was authorized.<sup>88</sup> Cablevision paid statutory licensing and retransmission fees and its subscribers were able to view television programs in real-time.<sup>89</sup> The only issue in *Cablevision* was the supplemental RS-DVR service, which allowed subscribers to store the already authorized programs for later viewing.<sup>90</sup> Judge Chin's dissent highlighted how this difference created a stark contrast to Aereo's system, as Aereo paid no fees and its retransmissions were unauthorized.<sup>91</sup>

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<sup>83</sup> *Id.* at 689–90.

<sup>84</sup> *Id.*

<sup>85</sup> *Id.* at 690.

<sup>86</sup> *Id.* at 697 (Chin, J. dissenting) ("The system employs thousands of individual dime-sized antennas, but there is no technologically sound reason to use a multitude of tiny individual antennas rather than one central antenna; indeed, the system is a Rube Goldberg-like contrivance, over-engineered in an attempt to avoid the reach of the Copyright Act and to take advantage of a perceived loophole in the law.").

<sup>87</sup> *Id.* at 698 (Chin, J., dissenting) (finding explicitly that to transmit a performance is to communicate it by any device or process, so Aereo's system fit squarely within the statute's plain meaning).

<sup>88</sup> *See id.* at 697 (Chin, J., dissenting).

<sup>89</sup> *Id.* at 701 (Chin, J., dissenting).

<sup>90</sup> *Id.* (Chin, J., dissenting).

<sup>91</sup> *Id.* at 702 (Chin, J., dissenting).

### III. THE MAJORITY'S FLAWED RATIONALE FOR ITS HOLDING

Judicial interpretation and application of the Transmit Clause to Internet-streaming services has resulted in two conflicting views, namely the Second Circuit approach, which focused on the potential audience capable of receiving the transmission, and the Ninth Circuit approach, which focused on whether the allegedly infringing service “performed” at all. The Supreme Court’s grant of certiorari in *Aereo* gave hope that the Court would provide guidance and bring clarity to this area of copyright law, but unfortunately its rationale only further confuses this issue. In deciding this case, the Court looked to two separate questions under the Copyright Act: (1) whether Aereo performed, and (2) if so, whether the performance was public.<sup>92</sup>

#### A. *Did Aereo Perform Publicly as Defined by the Copyright Act?*

The majority in *Aereo* determined that Aereo did perform as defined by the Copyright Act.<sup>93</sup> First, the majority acknowledged that the congressional intent in enacting the 1976 amendments was “to bring the activities of cable systems within the scope of the Copyright Act.”<sup>94</sup> The Court then held that Aereo was not just an equipment provider, but rather that its “activities [were] substantially similar to those of the CATV companies that Congress amended the [Copyright] Act to reach.”<sup>95</sup> In coming to this conclusion, the Court acknowledged that the systems at issue in both *Teleprompter* and *Fortnightly*—the two Court cases that preceded Congress’s passage of the 1976 Copyright Act—varied in one significant aspect from Aereo: those systems transmitted copyrighted material constantly while Aereo’s system only transmitted broadcasted programs when requested by a subscriber.<sup>96</sup> However, the Court disregarded this difference, finding instead that because of “Aereo’s overwhelming likeness to the cable companies targeted by the 1976 amendments, this sole technological difference between

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<sup>92</sup> *Am. Broad. Cos., Inc. v. Aereo, Inc.*, 134 S. Ct. 2498, 2504 (2014).

<sup>93</sup> *Id.* (“We conclude that Aereo is not just an equipment supplier and that Aereo ‘perform[s].’”).

<sup>94</sup> *Id.* at 2506.

<sup>95</sup> *Id.*

<sup>96</sup> *Id.* at 2507.

Aereo and traditional cable companies does not make a critical difference here.”<sup>97</sup> Accordingly, the Court held Aereo’s program to constitute a performance.<sup>98</sup>

The majority built their opinion upon a foundation of flawed reasoning. One major flaw is the majority’s dismissive conclusion that Aereo’s system constituted a performance within the meaning of the Copyright Act. The majority seemingly substitutes actual interpretation of the statutory text with a conclusion based upon a “guilt by resemblance”<sup>99</sup> analysis.<sup>100</sup> By concluding that Aereo was similar to a cable company without actually classifying it as one subject to the § 111 compulsory licensing agreements, the majority’s reasoning seems to be based almost entirely on the view that Aereo’s system was similar to the original cable television systems Congress sought to regulate through the 1976 amendments. Based on this looks-like-cable-TV standard, the majority concluded that because Aereo looked like a cable system, it should be held liable for infringement.<sup>101</sup>

Nothing in the plain language of the Copyright Act indicates that Aereo’s program was illegal. For copyright infringement, parties may be guilty of infringing on a theory of direct or secondary liability.<sup>102</sup> In direct liability cases, the defendant engages in the infringing conduct.<sup>103</sup> In contrast, secondary liability occurs when a

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<sup>97</sup> *Id.* (“Insofar as there are differences [between Aereo and the original cable television systems in *Fortnightly* and *Teleprompter*], those differences concern not the nature of the service that Aereo provides so much as the technological manner in which it provides the service.”).

<sup>98</sup> *Id.*

<sup>99</sup> *Id.* at 2515 (Scalia, J., dissenting).

<sup>100</sup> The majority examined the congressional intent of the 1976 amendments to the Copyright Act, and found that these changes were made to bring activities of cable systems within the scope of the Act. The majority then determined that Aereo’s activities were “substantially similar to those of CATV companies that Congress amended the Act to reach” and used this reasoning to find that Aereo’s activities constituted a performance within the meaning of the Transmit Clause. *Id.* at 2506.

<sup>101</sup> *Id.* at 2517 (Scalia, J., dissenting).

<sup>102</sup> *Id.* at 2512 (Scalia, J., dissenting) (citing *Sony Corp. of America v. Universal City Studios, Inc.*, 464 U.S. 417, 433 (1984)).

<sup>103</sup> *See id.* (Scalia, J., dissenting).



defendant is held liable for infringement by a third party even if the defendant was not a party to the infringing activities.<sup>104</sup> In *Aereo*, American Broadcasting Company (“ABC”) claimed that Aereo was *directly* infringing on their copyrighted works, so Aereo should have been found liable only if it met the standard of direct infringement.<sup>105</sup>

Aereo should not have been held liable for copyright infringement because it did not meet the standard of direct infringement. This standard is met “only if [Aereo had] engaged in volitional conduct that violates the Act.”<sup>106</sup> Such volitional conduct requires the defendant to have directed its conduct to the copyrighted material.<sup>107</sup> The language of the Copyright Act directly supports this proposition, as demonstrated by its consistent use of the active voice in describing an infringer’s actions directed towards the copyrighted work.<sup>108</sup> The question in this case is *who* is responsible for performing the copyrighted work: Aereo or its subscribers?<sup>109</sup>

In using Aereo’s services, the subscribers performed the copyright holders’ copyrighted works.<sup>110</sup> Aereo’s system responded to the

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<sup>104</sup> Secondary liability applies when a defendant “intentionally induc[es] or encourage[s] infringing acts by others or profits from such acts while declining to exercise a right to stop or limit [them].” *Id.* at 2512 (Scalia, J., dissenting) (quoting *Metro-Goldwyn Mayer Studios, Inc. v. Grokster, Ltd.*, 545 U.S. 913, 930 (2005)).

<sup>105</sup> *Id.* at 2514–15 (Scalia, J., dissenting) (“[The Network’s] request for a preliminary injunction—the only issue before this Court—is based exclusively on the direct-liability portion of the public performance claim.”) (citing App. to Pet. for Cert. 60a-61a).

<sup>106</sup> *Id.* at 2512 (Scalia, J., dissenting) (citing 3 W. PATRY, COPYRIGHT §9:5.50 (2013)).

<sup>107</sup> *Id.* (Scalia, J., dissenting) (noting “[e]very Court of Appeals to have considered an automated-service provider’s direct liability for copyright infringement has adopted that rule”).

<sup>108</sup> *Id.* (Scalia, J., dissenting) (noting the Act “defines ‘perform’ in active, affirmative terms”).

<sup>109</sup> *Id.* at 2512 (Scalia, J., dissenting).

<sup>110</sup> *Id.* at 2514 (Scalia, J., dissenting) (noting that “[t]he key point is that subscribers call all the shots”).

subscriber's program request: its servers, transcoders, and antennas were indifferent to the material that is transmitted.<sup>111</sup>

In order to be liable for direct infringement, the volitional-conduct standard requires that Aereo must have "trespassed on the exclusive domain of the copyright owner" *itself*.<sup>112</sup> The dissent illustrates this requirement by explaining the core difference between a copy-shop and a video-on-demand service.<sup>113</sup> In copy shops, the customer chooses the material to be copied, so the shop cannot be held liable if a customer makes an infringing copy.<sup>114</sup> In contrast, a video-on-demand service, such as Netflix, chooses and arranges available materials for its subscribers. This arrangement by Netflix constitutes a volitional act.<sup>115</sup> Aereo differs from Netflix because it did not provide subscribers with a prearranged assortment of programs.<sup>116</sup> Instead, Aereo assigned each subscriber his own antenna, and the subscriber chose to use that antenna to access whatever broadcasts were available over the air, some of which were copyrighted and others which were not.<sup>117</sup> Since Aereo did not select the content of the programs to be transmitted, it should not be held liable for directly infringing on ABC's copyrights.

Another difference highlighted by the Netflix analogy is that video-on-demand services perform "to the public," while Aereo did not. After Netflix selects the works it wants to perform, it purchases copies of those works and transmits the copy to its subscribers upon request.<sup>118</sup> When different subscribers choose the same video, they receive an individual transmission of that work, but when Netflix generates that transmission from the same single copy that Netflix purchased.<sup>119</sup> Thus, although the specific transmission

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<sup>111</sup> See *WNET, Thirteen v. Aereo, Inc.*, 712 F.3d 676, 682 (2d Cir. 2013), *rev'd*, *Am. Broad. Cos., Inc. v. Aereo, Inc.*, 134 S. Ct. 2498 (2014).

<sup>112</sup> *CoStar Group, Inc. v. Loopnet, Inc.*, 373 F.3d 544, 550–51 (4th Cir. 2004).

<sup>113</sup> *Aereo*, 134 S. Ct. at 2513 (Scalia, J., dissenting).

<sup>114</sup> *Id.*

<sup>115</sup> *Id.*

<sup>116</sup> *Id.* at 2514.

<sup>117</sup> *Id.* See also *WNET, Thirteen v. Aereo, Inc.*, 712 F.3d 676, 682 (2d Cir. 2013), *rev'd*, *Am. Broad. Cos., Inc. v. Aereo, Inc.*, 134 S. Ct. 2498 (2014).

<sup>118</sup> See *Aereo*, 134 S. Ct. at 2513 (Scalia, J., dissenting).

<sup>119</sup> Brief of 36 Intellectual Property and Copyright Law Professors as *Amici Curiae* in Support of Respondent at 28, *Am. Broad. Cos., Inc. v. Aereo, Inc.*,

to each subscriber is private, Netflix uses one copy to transmit the same program to numerous different subscribers. In contrast, each of Aereo's transmissions was an individual program copy that Aereo made upon user requests.<sup>120</sup>

The finding that Aereo's subscribers, rather than Aereo itself, performed does not mean that Aereo can escape secondary infringement. In fact, the Court should hold Aereo liable for this offense. But because the issue before the Court was only that of direct liability, the Court should not have found Aereo liable for copyright infringement through performing.<sup>121</sup>

*B. Uncertainty Created by the Finding that Aereo is Performing Publicly*

The dissent summarized the flaws in the majority's holding with the following syllogism: "(1) Congress amended the Act to overrule our decisions holding that cable systems do not perform when they retransmit over-the-air broadcasts; (2) Aereo looks a lot like a cable system; therefore (3) Aereo performs."<sup>122</sup> This rationale injects uncertainty into future cases of copyright infringement by contradicting settled jurisprudence of the bright-line volitional-conduct test and by providing little criteria for determining future cases.<sup>123</sup>

The majority's rationale was that because Aereo was similar to a cable system, the majority should treat it as such to determine

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134 S. Ct. 2498 (2014) (No. 13-461) ("In a video-on-demand service like Netflix, the provider chooses audiovisual works, obtains copies of those works, and offers to transmit performances of those works to any person agreeing to the provider's terms. Numerous subscribers receive individual transmissions of the same work generated at different times from the same copy.").

<sup>120</sup> See *supra* notes 23–29 and accompanying text.

<sup>121</sup> *Aereo*, 134 S. Ct. at 2514–15 (Scalia, J., dissenting).

<sup>122</sup> *Id.*

<sup>123</sup> See, e.g., *CoStar Group, Inc. v. LoopNet, Inc.*, 373 F.3d 544, 550 (4th Cir. 2004) ("But to establish direct liability . . . [t]here must be actual infringing conduct with a nexus sufficiently close and causal to the illegal copying that one could conclude that the machine owner himself trespassed on the exclusive domain of the copyright owner."); see also *Sony Corp. of America v. Universal City Studios, Inc.*, 464 U.S. 417 (1984).

whether it performs.<sup>124</sup> Even accepting that rule, the Court has provided no guidance for which factors contribute to determining what qualifies as a cable-lookalike system.<sup>125</sup> Does the program in question have to store live broadcasts for future viewing at the user's discretion? Based on the ruling in *Cablevision*, this could not be the standard, otherwise the RS-DVR service would also be infringing.<sup>126</sup> Alternatively, the proper criteria could be that if the program offers access to live broadcasts via the Internet, it constitutes performance. However, this also does not seem to be a good working basis because of the potential for Aereo to simply require users to wait a few minutes or more before streaming the program to them.<sup>127</sup>

Based on these uncertainties, the test the Court seems to be proposing is an ad hoc test to determine whether the totality of the circumstances would indicate that a cable-like service is being provided.<sup>128</sup> However, that still leaves uncertainty in regards to the traditional volitional-conduct requirements. Would this new ad hoc test replace the bright-line volition test or would each stand alone, based upon the discretion of the court hearing the case?

The majority's refusal to provide a clear working standard for interpreting and applying the Transmit Clause to new technologies creates great uncertainty for determining future cases. The majority acknowledged that its holding would affect future cases, yet chose to ignore these implications.<sup>129</sup> It instead deferred that decision to a later date, when a specific new technology comes before the

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<sup>124</sup> *Aereo*, 134 S. Ct at 2511 (finding that Aereo's practices were "highly similar to those of CATV systems in *Fortnightly* and *Teleprompter*," and as such, they are within the scope of the Transmit Clause).

<sup>125</sup> *Id.* at 2516 (Scalia, J., dissenting).

<sup>126</sup> *Cartoon Network LP, LLLP v. CSC Holdings, Inc. (Cablevision)*, 536 F.3d 121 (2d Cir. 2008).

<sup>127</sup> *Aereo*, 134 S. Ct. at 2516 (Scalia, J., dissenting).

<sup>128</sup> *Id.* at 2517 (Scalia, J., dissenting) ("That leaves as the criterion of cable-TV-resemblance nothing but th'ol' totality-of-the-circumstances test (which is not a test at all but merely assertion of an intent to perform test-free, ad hoc, case-by-case evaluation).").

<sup>129</sup> *Id.* at 2511.

Court.<sup>130</sup> Specifically, the majority stated that questions involving novel issues, such as cloud technology, “should await a case in which they are squarely presented.”<sup>131</sup> The Court has seemingly punted the issues to lower courts to decide how to interpret future copyright cases that fall outside the limited holding of the cable-lookalike standard the majority proposed here. The Court’s decision to defer future technologies to a later date is problematic because it allows for this ongoing uncertainty in interpreting the Copyright Act to persist on a case-by-case basis.

#### IV. IMPLICATIONS ON NEW TECHNOLOGY

Today, technology plays a vital role in society with advances created at a constant and rapid pace. The *Aereo* decision is important for providing guidelines to interpret the Copyright Act in light of new technologies. Both of the parties from *Aereo* addressed this argument, but the majority responded only by declaring, “[w]e cannot now answer more precisely how the *Transmit Clause* or other provisions of the Copyright Act will apply to technologies not before us.”<sup>132</sup> The majority acknowledged that questions regarding emerging technologies would inevitably arise, but instead of addressing these questions and providing a standard for future courts to work with, the majority chose to ignore this issue.<sup>133</sup> Accordingly, when determining copyright liability for new technologies, future courts will have to apply the majority’s reasoning to various technologies, even those that do not fall into the majority’s “cable-lookalike” standard. This will negatively impact the development and application of novel technologies.

##### A. *Effects on Cloud Computing*

Cloud computing is an Internet-based system in which different services, including networks, servers, storage, and applications, are

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<sup>130</sup> *Id.* (“We cannot now answer more precisely how the *Transmit Clause* or other provisions of the Copyright Act will apply to technologies not before us.”).

<sup>131</sup> *Id.*

<sup>132</sup> *Id.*

<sup>133</sup> *Id.*

delivered to various devices and users via the Internet.<sup>134</sup> It allows hardware to be moved off-site while retaining access through an Internet connection, and is already in wide use nationally. Users are able to access, share, and edit their stored data anywhere.<sup>135</sup> The virtual services offered through the cloud have shown measurable economic value by creating thousands of new jobs and providing trillions of dollars in increased revenues.<sup>136</sup>

Unfortunately, this important, growing industry is threatened by the Court's *Aereo* decision. For example, many individuals currently use cloud services, such as Dropbox,<sup>137</sup> to store their data. Individual users store their data with Dropbox, and can subsequently retrieve it at any time and place of their choosing. Some of the users may even use Dropbox to store data identical to that of other users, such as a copy of a television program, but each user will have his own copy saved to his own Dropbox folder. Like the programs transmitted by Aereo, Dropbox stores data in different files, each for a specific user. When requested by an individual user, Dropbox transmits the stored data to that user.

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<sup>134</sup> Peter Mell & Timothy Grance, *The NIST Definition of Cloud Computing*, NAT'L INST. OF STANDARDS & TECH., U.S. DEP'T OF COMMERCE, SPECIAL PUB'N 800-145t 2 (2011), available at <http://csrc.nist.gov/publications/nistpubs/800-145/SP800-145.pdf>. ("Cloud computing offers ubiquitous, convenient, on-demand network access to a shared pool of configurable computing resources (e.g., networks, servers, storage, applications, and services) that can be rapidly provisioned and released with minimal management effort or service provider interaction.").

<sup>135</sup> Sand Hill Group, *Job Growth in the Forecast: How Cloud Computing is Generating New Business Opportunities and Fueling Job Growth in the United States*, at 13 (2012), available at <http://www.news-sap.com/files/Job-Growth-in-the-Forecast-012712.pdf>.

<sup>136</sup> John F. Gantz, et al., *Cloud Computing's Role in Job Creation*, at 2, IDC White Paper (2012), available at <http://people.uwec.edu/HiltonTS/ITConf2012/NetApp2012Paper.pdf> ("For businesses, cloud computing has the potential to create \$1.1 trillion in revenue per year by 2015."); Sand Hill Group, *supra* note 135, at 13 ("And for American workers, cloud computing has the potential to create 685,000 jobs over the next 5 years, on top of the nearly 80,000 U.S. jobs that were created as a result of cloud computing in 2010 alone.").

<sup>137</sup> There are various other such cloud storage technologies that provide the same function as Dropbox, and all are similarly endangered by the majority's *Aereo* holding. The author only refers to Dropbox in this section of the paper for simplicity's sake.

Dropbox is also indifferent to the content uploaded. Accordingly, a user may upload an illegally obtained copy of a television program to Dropbox access it later for viewing.

By refusing to differentiate between cloud technologies such as Dropbox and cable systems similar to Aereo, the majority allows the possibility for cloud technologies to fall victim to the same ad hoc judgment of liability for direct copyright infringement. The majority's conclusion that Aereo directly infringed on ABC's copyrighted works was based on its finding that Aereo's program was similar to the cable television systems that Congress sought to bring within the scope of the 1976 Copyright Act.<sup>138</sup> This conclusion allows lower courts, in making future decisions regarding cloud computing, to use the same totality of the circumstances judgment as that used by the *Aereo* majority.<sup>139</sup> In such a case, a lower court could easily determine that like Aereo, Dropbox publicly performs copyrighted works.

An example using a copyrighted television program demonstrates this prediction. In such a case, an individual would decide he wanted to watch a copyrighted program and could download it in a variety of legal ways. Instead of saving that program to his device's personal hard drive, the user could upload it to Dropbox for storage and access it when he desired. Another individual deciding to download the same program, but through illegal means, could also upload his copy to Dropbox for storage. When either user wanted to watch the stored program at a later time, he or she could log in to his or her respective Dropbox account and access the stored program. The program viewed by

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<sup>138</sup> *Aereo*, 134 S. Ct. at 251 ("In sum, having considered the details of Aereo's practices, we find them highly similar to those of the CATV systems in *Fortnightly* and *Teleprompter*. And those are activities that the 1976 amendments sought to bring within the scope of the Copyright Act. Insofar as there are differences, those differences concern not the nature of the service that Aereo provides so much as the technological manner in which it provides the service. We conclude that those differences are not adequate to place Aereo's activities outside the scope of the Act.").

<sup>139</sup> As discussed *supra* in Part IV, the *Aereo* majority explicitly stated that it expected there to be questions of cloud computing in the future but chose to defer these questions to a time when a specific case involving that technology would come before the court. See *Aereo*, 134 S. Ct. at 2511.

each user will be his own copy which he uploaded to Dropbox, and even though the programs are identical, the first user will only have access to his legally obtained program while the second user will have access only to his illegally obtained program.

This scenario is very similar to that which *Aereo* proscribes, and following the majority's *Aereo* rationale, Dropbox could be held liable for direct infringement. First, a court deciding Dropbox's case would need to determine whether or not Dropbox performs within the meaning of the Copyright Act. Following the majority rationale, the deciding court would consider whether Dropbox fits the cable-lookalike standard that the majority noted as a determinative factor in *Aereo*.<sup>140</sup> However, without specific guidelines for determining what this standard really entails, there is room for interpretation. Although Dropbox's primary function is to offer users a cloud-based storage service and not to provide users access to broadcast programs, the fact that customers can use the program to stream broadcast programs could provide a lower court with a basis for finding that Dropbox is performing. This possibility is dangerous because it allows for useful cloud computing technologies to fall victim to direct copyright infringement, which would result in a chilling effect on the development of such technologies that have already had, and continue to have, beneficial effects on our economy.

The traditional volitional-conduct test that the *Aereo* dissent endorses is a better approach to this hypothetical. This approach gives courts clear guidance in applying the Copyright Act to different technologies rather than forcing them to interpret the Copyright Act in light of each new technology. With the Dropbox example, a court need only ask whether Dropbox's service has engaged in volitional conduct directed towards copyrighted material. Here, the answer is unequivocally no. Dropbox only provides its users cloud-storage facilities and is indifferent to the data content that its users store. Finding that Dropbox does not perform under the volitional-conduct test, a court need not decide

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<sup>140</sup> *Aereo*, 134 S. Ct. at 2507 (noting "Aereo's overwhelming likeness to the cable companies targeted by the 1976 amendments," as a determinative factor in finding Aereo liable).



whether such performance is public. This explicit guideline provides courts with a standard to apply, ensures uniformity in copyright interpretation in new technologies, and avoids costly litigation that comes with the majority's ad hoc approach.

The importance of cloud technology to society is undisputed. It is a digital service that is already in high demand and has the potential for significant economic growth.<sup>141</sup> The continued growth of cloud computing however depends on an interpretation of the Copyright Act that does not threaten cloud services with costly litigation that accompanies direct infringement suits. By refusing to explicitly hold that cloud services are not subject to the same subjective cable-lookalike test established in *Aereo*, the majority created the potential for future confusion in interpreting the Transmit Clause to cloud computing technology.

#### B. *Growing Market for Aereo-Like Services*

The traditional cable industry is a generally anticompetitive market, with only one or two companies dominating any specific geographic region.<sup>142</sup> The lack of choice in cable providers has forced many consumers to obtain services through these providers,<sup>143</sup> despite their consistent ranking at the bottom of the American Consumer Satisfaction Index.<sup>144</sup> In such a market, many consumers would welcome an alternative to traditional cable companies. The FCC even favors such consumer autonomy, evidenced by its published guidelines detailing how consumers can

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<sup>141</sup> See Gantz et al., *supra* note 136, at 2.

<sup>142</sup> John Cassidy, *We Need Real Competition, Not a Cable-Internet Monopoly*, THE NEW YORKER, February 13, 2014, <http://www.newyorker.com/news/daily-comment/we-need-real-competition-not-a-cable-internet-monopoly>.

<sup>143</sup> *Id.* (“In some big cities, broadband consumers have a choice between a cable operator, such as Comcast, and a telephone provider, such as Verizon. But that’s practically no choice at all.”).

<sup>144</sup> Brief of *Amici Curiae* The Consumer Federation of America and the Consumers Union in Support of Respondent at 14, *Am. Broad. Cos., Inc. v. Aereo, Inc.*, 134 S. Ct. 2498 (2014) (No. 13-461) (“The ACSI rates consumer satisfaction using a model that includes such factors as the reasonableness of pricing, the availability of features, and the quality of customer service. Cable providers have earned a reputation for being unresponsive to customer demand and heedless of customer complaints.”).

access free over-the-air broadcast signals.<sup>145</sup> To take advantage of these over-the-air signals, consumers must purchase their own home equipment, which averages about \$700.<sup>146</sup> In addition to the initial equipment cost, customers are responsible for installing and maintaining these systems, which many consumers lack the technical ability to do.

By providing a service that allows users to view broadcasted programs without subscribing to a cable company, Aereo capitalized on the growing “cable cutting” market. This market comprises of consumers who have found alternative ways to view television programs without paying for a cable subscription.<sup>147</sup> One of the greatest selling points of the cable cutting industry is the low cost. Although consumers still needed an Internet connection, Aereo’s service cost only \$8 per month.<sup>148</sup> Similar services are comparable in price with Netflix costing only \$8.99 per month for new members.<sup>149</sup> These prices are significantly lower than the average cable bill, which was reported to be \$64.41 per month.<sup>150</sup>

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<sup>145</sup> See *Installing Consumer-Owned Antennas and Satellite Dishes*, FCC (last reviewed Mar. 11, 2014), available at <http://www.fcc.gov/guides/installing-consumer-owned-antennas-and-satellite-dishes>.

<sup>146</sup> See Brief of *Amici Curiae* The Consumer Federation of America and the Consumers Union in Support of Respondent at 19, *Am. Broad. Cos., Inc. v. Aereo, Inc.*, 134 S. Ct. 2498 (2014) (No. 13-461) (noting that such equipment includes “high-definition [over-the-air] antenna, a DVR-type system, an external hard drive, and a Slingbox or similar device to watch shows on multiple devices”).

<sup>147</sup> Julie Borna, *Aereo: Cutting the Cord or Splitting the Circuit?*, 22 COMMLAW CONSPECTUS 287, 306 (2014) (noting that reasons for “cable cutting” include having neither the time nor the money to watch the hundreds of channels that come with a monthly cable subscription) (citing Gerry Smith, *My Year Using Aereo: How a Dime-Sized Antenna Met My TV Needs*, HUFFINGTON POST (Sept. 11, 2013), [http://www.huffingtonpost.com/gerry-smith/my-year-using-aereo\\_b\\_3745981.html](http://www.huffingtonpost.com/gerry-smith/my-year-using-aereo_b_3745981.html)).

<sup>148</sup> *Id.* at 290.

<sup>149</sup> In May 2014, Netflix announced it was raising the cost of its subscription from \$7.99 to \$8.99 per month for new members, but grandfathered in the \$7.99 price for current members for two years. See Dino Grandoni, *Netflix Raises Price by \$1 for New Customers*, HUFFINGTON POST (May 9, 2014), [http://www.huffingtonpost.com/2014/05/09/netflix-price-increase\\_n\\_5294450.html](http://www.huffingtonpost.com/2014/05/09/netflix-price-increase_n_5294450.html).

<sup>150</sup> Christopher Zara, *Cable Bills Rising: Amid Comcast-TWC Merger Scrutiny, FCC Media Bureau Report Shows Pay-TV Price Hikes Outpacing Inflation*,

However, Aereo provided unique services that Netflix and other similar providers, such as Hulu Plus and Amazon, do not: Aereo allowed subscribers to watch programs nearly-live and gave access to live sports broadcasts.<sup>151</sup>

The success of Aereo, prior to the Court's decision, and other similar services demonstrates that there is a true market for cable-television alternatives. In fact, both HBO and CBS have recently announced plans to offer Internet streaming of their live programs as well as past shows on demand.<sup>152</sup> These recent announcements demonstrate that cable companies are noticing and responding to a shift away from traditional cable packages and towards more convenient, on-demand, and cost effective Internet-streaming options.

By holding that Aereo performed copyrighted works, the majority chills the development of services that threaten the traditional anticompetitive cable television market. Although a movement away from the cable market continues, as evidenced by CBS and HBO's recent Internet-streaming option and the growing numbers of "cable cutters," most Internet-based television providers do not offer the ability to watch programs online in real-time or to watch live sports programs. Aereo, in contrast, offered both. If the majority held instead that Aereo's program did not constitute a performance, its operations would have been allowed to continue, and would have motivated the anticompetitive cable monopolies to respond. Such a response would have benefitted consumers, most likely by lowering costs, providing more varied package options, or simply improving their customer services.<sup>153</sup>

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INT'L BUS. TIMES (May 20, 2014), <http://www.ibtimes.com/cable-bills-rising-amid-comcast-twc-merger-scrutiny-fcc-media-bureau-report-shows-pay-tv-1587304>.

<sup>151</sup> See Borna, *supra* note 147 and accompanying text. ("[T]o watch most sports, I just need the major networks,' and that's exactly what Aereo provides.").

<sup>152</sup> However, the new CBS service notably does not offer NFL games. Emily Steel, *Cord-Cutters Rejoice: CBS Joins Web Stream*, N.Y. TIMES (Oct. 16, 2014), [http://www.nytimes.com/2014/10/17/business/cbs-to-offer-web-subscription-service.html?\\_r=1](http://www.nytimes.com/2014/10/17/business/cbs-to-offer-web-subscription-service.html?_r=1).

<sup>153</sup> An example of how competition improves this market is visible in Google's introduction of Google Fiber to Kansas City. There, Time Warner

## V. RECOMMENDATIONS

The majority's holding that Aereo is directly liable for copyright infringement injects confusion into future Copyright Act interpretations. To remedy this uncertainty, (1) Congress can respond by enacting new legislation to specifically address services such as Aereo's, (2) lower courts can find Aereo to be subject to the compulsory licensing scheme of § 111, or (3) the FCC can propose its own remedy, as it is an agency that commonly regulates cable-provider technologies.

### A. *How Congress Can Fix Aereo*

In cases of new and emerging technologies, the courts should defer "to Congress when major technological innovations alter the market for copyrighted materials."<sup>154</sup> If the majority had applied the volitional-conduct test in *Aereo*, its rationale would have conformed to prior jurisprudence, and validated the Second Circuit's interpretation as the correct standard in these Transmit Clause cases. That, in turn, would have allowed Congress to step in and address the issue of online streaming and copyright infringement. Instead, the Court chose to find infringement by an ad hoc "guilt by resemblance" test.<sup>155</sup> That decision provides little guidance for lower courts in deciding future cases.

The Legislature is the branch of government best suited to introduce new interpretation of the Copyright Act in relation to novel technologies. In the past, Congress has not hesitated to act when it believed a new innovation required a new legal interpretation. For example, when the Eleventh Circuit held that a satellite carrier was a cable system entitled to § 111 compulsory licensing, Congress responded by codifying a separate statutory

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Cable almost immediately doubled its Internet speeds and offered up to seventy percent reductions in prices. See Lauren K. Ohnesorge, *Will Google Fiber Mean Lower-Cost Time Warner Cable Service?*, CHARLOTTE BUS. J. (Feb. 21, 2014), <http://www.bizjournals.com/charlotte/blog/morning-edition/2014/02/will-google-fiber-mean-lower-cost-time-warner.html>.

<sup>154</sup> Sony Corp. of Am. v. Universal City Studios, Inc., 464 U.S. 417, 431 (1984).

<sup>155</sup> Am. Broad. Cos., Inc. v. Aereo, Inc., 134 S. Ct. 2498, 2515 (2014) (Scalia, J., dissenting).

licensing provision for satellite carriers.<sup>156</sup> More recently, the House Judiciary Committee Chairman announced the initiation of a comprehensive review of U.S. copyright law, paying particular attention to updates necessary in light of new technologies.<sup>157</sup> Additionally, several legislative proposals before Congress would alter the legal structure at issue here.<sup>158</sup> One such proposal is the Consumer Choice in Online Video Act, which expressly permits equipment rental like that offered by Aereo, while exempting such rental services from certain retransmission fees.<sup>159</sup>

The efforts taken by Congress in the past to remedy improper legal classification of technologies demonstrate its capability in this field of law. Its current review of national copyright law and its present consideration of several legislative bills addressing systems similar to Aereo's demonstrate that Congress recognizes the importance of these issues. As such, Congress should either enact new legislation, like it did for satellite carriers, or amend the current legislation to explicitly address this issue.

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<sup>156</sup> *WPIX, Inc. v. ivi, Inc.*, 691 F.3d 275, 281 (2d Cir. 2012) (citing The Satellite Home Viewer Act of 1998, 17 U.S.C. § 119).

<sup>157</sup> Press Release, House Judiciary Committee, Chairman Goodlatte Announces Comprehensive Review of Copyright Law (Apr. 24, 2013), *available at* <http://judiciary.house.gov/index.cfm/2013/4/chairmangoodlatteannouncescomprehensiveviewofcopyrightlaw>.

<sup>158</sup> Brief of *Amicus Curiae* Am. Cable Ass'n in Support of Respondent at 34, *Am. Broad. Cos., Inc. v. Aereo, Inc.*, 134 S. Ct. 2498 (2014) (No. 13-461) (noting that some examples of legislation that would address retransmission rules include the Next Generation Television Marketing Act (H.R. 3720), Television Consumer Freedom Act of 2013 (S.912), and the Video Consumers have Options in Choosing Entertainment Act ("Video CHOICE Act") of 2013 (H.R. 3719)).

<sup>159</sup> The Consumer Choice in Online Video Act, (S. 1680), 113th Cong. (2013) (providing the legislation would "[p]ermit[] antenna rental services to rent to a consumer access to an individual antenna to view over-the-air broadcast television signals transmitted directly to: (1) the consumer over the Internet or another IP-based transmission path; or (2) an individual data storage system, including an online remote system, for recording and then made accessible to that consumer through an IP-based path. Exempts such antenna rental services from certain retransmission consent fees.")

B. *Specifically Addressing Internet Services within § 111*

By holding Aereo liable for copyright infringement because it resembles the cable television services Congress sought to bring under the scope of the Transmit Clause, without actually defining it as a cable system within § 111,<sup>160</sup> the Court injects uncertainty into future Copyright Act interpretation.

A solution to this problem is to include Internet transmissions of broadcasted programs as cable systems within the meaning of § 111. The easiest way for courts to achieve this inclusion would be to interpret such Internet transmissions as a “facility” within the definition of cable systems.<sup>161</sup> Unfortunately, the Copyright Office has expressly refused to classify Internet services as cable systems so they might receive the § 111 statutory licenses.<sup>162</sup> Since the Copyright Office is an expert to be respected in this area, future courts will have a difficult time disregarding the Copyright Office’s express assertion and reading in a definition of Internet services to the text of § 111.

However, the Copyright Office’s statement was made over a decade ago. And since then, Internet-based technologies have improved, are more widely used, and contribute to our national economy. Courts should find that the Copyright Office’s view is antiquated, and as such, abandon it.

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<sup>160</sup> See *Aereo*, *supra* notes 97–98 and accompanying text.

<sup>161</sup> See 17 U.S.C. § 111(f)(3) (2012) (“A ‘cable system’ is a *facility*, located in any State, territory, trust territory, or possession of the United States, that in whole or in part receives signals transmitted or programs broadcast by one or more television broadcast stations licensed by the Federal Communications Commission, and makes secondary transmissions of such signals or programs by wires, cables, microwave, or other communications channels to subscribing members of the public who pay for such service.”) (emphasis added).

<sup>162</sup> *WPIX, Inc. v. ivi, Inc.*, 691 F.3d 275, 283 (2d Cir. 2012) (quoting U.S. Copyright Office, *A Review of the Copyright Licensing Regimes Covering Retransmission of Broadcast Signals* 97 (1997) that “Internet retransmission services are not cable systems and do not qualify for § 111 compulsory licenses” because they are “so vastly different from other retransmission industries now eligible for compulsory licensing”).

C. *Possibility of FCC Involvement*

Because the FCC is involved in many aspects of regulating cable television systems,<sup>163</sup> looking to this agency for guidance is another possibility. In fact, Aereo recently filed an ex parte notice disclosing recent conversations with the FCC, where it requested the FCC's support for including a new category of online video services with the FCC's definition of a Multichannel Video Programming Distributor.<sup>164</sup> Specifically, services whose facilities deliver subscribers linear channels of video programming would fit this definition.<sup>165</sup> This change would allow Aereo to operate like a cable-TV provider, meaning a cable system within the § 111 definition, and thus help Aereo in seeking licenses and negotiating for the rights to retransmit channels.<sup>166</sup>

VI. CONCLUSION

The majority decision in *American Broadcasting Companies, Inc. v. Aereo, Inc.* further muddled an area of law that desperately needed clarity. Both circuit and lower courts disputed the proper way to interpret the public performance right of copyright holders in cases of Internet services that streamed copyrighted broadcast television programs to subscribers. Instead of providing clarity and guidance to these contradictory lower court decisions, the *Aereo* majority abandoned the volitional-conduct test for direct copyright liability and chose an ad hoc and totality of the circumstances test for determining whether an Internet system closely enough resembled a cable system. Despite the majority's assurance that its holding would not deter future innovations of new technologies, implications of this holding for cloud services and the cable cutting market indicate otherwise. By refusing to give courts direction in determining the legality of new technologies, the Court's opinion

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<sup>163</sup> See discussion *supra* Section IV.B.

<sup>164</sup> Alex Barinka, *Aereo Asks the FCC to Change Definition of Video Distributor*, BLOOMBERG (Oct. 13, 2014), <http://www.bloomberg.com/news/2014-10-13/aereo-asks-fcc-to-change-definition-of-video-distributor.html>.

<sup>165</sup> An example of such programming is local, over-the-air broadcasting.

<sup>166</sup> See Barinka, *supra* note 164.

interferes with the advancement and usage of cloud computing and perpetuates cable monopolies.

However, there are options to remedy the negative effects of the majority's holding. For example, Congress could amend the Copyright Act by including Internet providers in § 111's definition of cable systems subject to compulsory licensing agreements. Congress could also enact new legislation that addresses this issue specifically. Alternatively, lower courts could read Internet providers into the § 111 definition of "facilit[ies]," despite the Copyright Office's prior statements to the contrary. Finally, the FCC could take action by defining Aereo-like services as cable-like systems under the Multichannel Video Programming Distributor definition, allowing Aereo, and other similar systems, to pursue licensing agreements and negotiations as Internet-based cable providers.